IN THE DRAWINGS

Please amend FIGURES 1 through 4 of the drawings, as proposed in red on the attached replacement sheets.

REMARKS

Claims 1, 3-6, 8-11, 13-16 and 18-24 are pending in this application.

Claims 1, 3-6, 8-11, 13-16 and 18-24 have been rejected.

Claims 1, 6, 8-11, 16 and 22 have been amended as shown above.

Claims 1, 3-6, 8-11, 13-16 and 18-24 are now pending in this application.

Reconsideration and full allowance of Claims 1, 3-6, 8-11, 13-16 and 18-24, as amended, are respectfully requested.

I. OBJECTIONS TO THE DRAWINGS

The Examiner stated that the drawings that were received on January 24, 2005 are acceptable. (April 24, 2005 Office Action, Page 2, Paragraph 3). The Examiner objected to the drawings "because descriptive textual labels are needed" for certain elements of the invention. (April 24, 2005 Office Action, Page 2, Paragraph 4). In response, the Applicants have proposed amendments to FIGURES 1-4 to add the descriptive textual labels requested by the Examiner. The Applicants note that the reference numeral 100 for the system 100 now clearly points to both FIGURE 1A and FIGURE 1B. In view of the proposed amendments to the drawings, the Applicants respectfully request the Examiner to withdraw the objections to the drawings.

II. AMENDMENTS TO THE CLAIMS

The Applicants have amended Claims 1, 6, 11 and 16 to correct typographical errors. The expression "sorts keys" has been corrected in Claims 1, 6, 11 and 16 to read "sort keys." The Applicants have also amended Claims 6, 8-10 and 22 to replace the term "receiver" with the expression "an apparatus comprising one of: an audio receiver, a video receiver, an Internet access device, and a remote control device." These elements are shown in FIGURE 1A and are mentioned in the text of the specification. Therefore, no new matter had been added as a result of these amendments.

III. REJECTIONS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

The Examiner rejected Claims 1, 3-6, 8-11, 13-16 and 18-24 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. (April 24, 2005 Office Action, Page 3, Paragraph 6). Specifically, the Examiner asserted that the following limitations do not appear to be described properly in the specification: "current user task context", "content type," "sort keys," "primary sort key," "secondary sort key," and "receiver". These rejections are respectfully traversed.

Applicants respectfully submit that the feature "current user task context" is described throughout the specification, and particularly on Page 11, Lines 12-23; Page 12, Lines 1-3; Page 12, Lines 9-12; Page 15, Lines 1-7; Page 14, Lines 14-22; and Page 18, Lines 1-5. For example, on Page 11, Lines 14-23, the present application states: "Searches may be performed for different purposes or in different manners. For example, user searches may be performed either to record, to playback from previous recording, or to contemporaneously view, or with a desire find a specific item rather than to browse available content. Depending on the

task which the user is attempting to complete, the system may utilize the task context to automatically select primary, secondary, and other (e.g., tertiary) sort keys for ordering the results list."

Furthermore, on Page 18, Lines 1-5, specific examples are given for the expression "user task context." They are: (1) search for content to record, and (2) browsing currently available content for contemporaneous viewing and/or listening, and (3) search previously recorded content for particular item. These specific examples show that the specification clearly defines what is meant by the term current user task context". Therefore, the feature "current user task context" is sufficiently described in the specification.

Applicants also respectfully submit that the feature "content type" is described throughout the specification. In particular, the specification clearly states: "In the present invention, the sort keys are also dependent on the content type being searched, with different sort key combinations being set by default for the system, or derived from user histories, for specific content types. User interface display 210 in FIGURE 2B includes a user control 211 for searching for currently available audio content . . . . The system may anticipate sort orders preferred by most people for different content types (e.g., video, songs, books, etc.) in default sort keys or sort key combinations, of, in the learning process, create separate rules within a user profile for each content type and user task context." (Specification, Page 14, Line 23 to Page 15, Line 21).

The cited portion of the specification mentions specific examples for the expression "content type." They are: (1) audio (shown in user interface display 210 in FIGURE 2B), and

(2) video, and (3) songs, and (4) books. These specific examples show that the specification clearly defines what is meant by the term "content type." Therefore, the feature "content type" is sufficiently described in the specification.

The Examiner objected to the Applicants' use of the expression "and/or" in the specification as supposedly being too vague. The Examiner stated that "For example, page 3 lines 5-8, the disclosure states 'a sorting mechanism utilizing content type and/or user task context to automatically determine the primary sort key and the any additional (e.g. secondary) sort keys'. Also, note the following citations page 6 lines 17-20 and page 11 lines 6-10, 'adaptable sort keys depending on user task context and/or content type'. It is unclear as to whether the task context is the same as the content type." (April 28, 2005 Office Action, Page 3, Lines 10-15). The Examiner also stated "The language 'and/or' is vague and it is unclear as to whether the terms are different." (April 28, 2005 Office Action, Page 7, Lines 15-16).

The Applicants respectfully traverse these objections of the Examiner. The meaning of the expression "and/or" is well known. In the portion of the specification cited by the Examiner the use of the expression "and/or" clearly expresses the meaning: "a sorting mechanism utilizing: (1) content type and user task context together, or (2) content type alone, or (3) user task context alone to automatically determine the primary sort key and the any additional (e.g. secondary) sort keys." The Applicants respectfully submit that the use of the expression "and/or" does not make create any lack of clarity as to whether "the task context is the same as the content type." On the contrary, the use of the expression "and/or" makes it clear that the two expressions "user task context" and "content type" refer to two different concepts.

In addition, the specific examples previously cited for the expression "user task context" and the examples previously cited for the expression "content type" clearly show that the two expressions are not "the same" and that the two expressions refer to two different concepts.

The Examiner also suggested that the expression "adaptable sort keys depending on user task context and/or content type" is vague due to the use of the expression "and/or." The well known meaning of the expression "and/or" makes it clear that the meaning of the expression is "adaptable sort keys depending on (1) user task context and content type together, or (2) user task context alone, or (3) content type alone." The Applicants respectfully submit that the use of the expression "and/or" does not make create any lack of clarity as to whether the "user task context" is the same as the "content type." The use of the expression "and/or" makes it clear that the two expressions "user task context" and "content type" refer to two different concepts.

Accordingly, the Applicants respectfully request the Examiner to withdraw the objection to the claims based upon an alleged vagueness in the meaning of the well known expression "and/or."

Applicants also respectfully submit that the feature "sort key" is described throughout the specification, and particularly on Page 2, Lines 9-16 and Page 14, Lines 1-13. For example, Page 2, Lines 10-13 of the specification state: "For example, within entertainment systems users can often sort lists of content by title, genre, time of day, channel, actors, directors, or even by recommendation or rating." These specific examples show that the feature "sort keys" is sufficiently described in the specification.

Applicants also respectfully submit that the features "primary sort key" and "secondary sort key" are described throughout the specification, and particularly on Page 10, Line 20 to Page 11, Line 1; Page 12, line 1 to Page 14, Line 22. For example, Page 11, Lines 19-23 of the specification states: "Depending on the task . . . , the system may utilize the user task context to automatically select primary, secondary, and other (e.g., tertiary) sort keys for ordering the results list." In addition, Page 12, Lines 3-8 of the specification state: " . . . the system may automatically sort results based on recommendation rating (primary sort key) and . . . alphabetically by title (secondary sort key), the ordering which would most effectively help the user." Furthermore, Page 13, Lines 7-15 of the specification state: "Intuitive and natural secondary and lower-order sort keys are selected based on context, content type, and user preferences . . . . Heuristics or rules may be defined for selecting the primary, secondary and/or lower-order sort keys, or default sort keys may be simply set and/or modified by the user." Therefore, the features "primary sort key" and "secondary sort key" are sufficiently described in the specification.

The feature "receiver" has been amended in the claims to now recite "an apparatus that comprises one of: an audio receiver, a video receiver, an Internet access device, and a remote control device." Applicants respectfully submit that the feature "apparatus" is shown in Figure 1A as reference numbers 110, 111, 112 and 113, and described throughout the specification, and particularly on Page 7, Line 14 to Page 12, Line 12. Therefore, the feature "apparatus" is sufficiently described in the specification.

Accordingly, the Applicants respectfully request the Examiner withdraw the 35 U.S.C. § 112, first paragraph rejections of the claims.

IV. REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

The Examiner rejected Claims 1, 3-6, 8-11, 13-16 and 18-24 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. (April 24, 2005 Office Action, Page 4, Paragraph 8). Specifically, the Examiner asserted that the meaning of the limitation "current user task concept and content type" is vague. The Applicants respectfully traverse this rejection.

As described above in Section III above, the elements "current user task context" and "content type" are sufficiently described in the specification, and as a result are not vague. Applicants hereby incorporate by reference the arguments and the citations to the specification that were made in Section II of this document in connection with the Applicants' traversal of the rejections of the claims under 35 U.S.C. § 112, first paragraph. For the reasons and arguments previously presented, the rejected claims are not vague under 35 U.S.C. § 112, second paragraph.

In addition, the amendment of Claim 6 to claim an apparatus instead of a receiver removes any previously existing vagueness or lack of clarity with respect to that claim.

Accordingly, the Applicants respectfully request the Examiner withdraw the 35 U.S.C. § 112, second paragraph rejections of the claims.

V. REJECTIONS UNDER 35 U.S.C. § 103

The Examiner rejected Claims 1, 3-6, 8-11, 13-16 and 18-24 under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 6,601,067 to Hiyoshi ("*Hiyoshi*") in view of a paper by Signore et al. entitled "Using Procedural Patterns in Abstracting Relational Schemata" ("*Signore*"). (April 28, 2005 Office Action, Pages 4-7). In view of the above amendments, the Applicants respectfully traverse these rejections.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or

motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

Hiyoshi recites a sort/merge processor 10 for extracting records from a group of input files according to a record extraction criterion, reformatting the extracted records according to record reformatting rules and sorting or merging the extracted and reformatted records for output to an output file. (*Hiyoshi*, Col. 4, Lines 40-55). Applicants agree with the Examiner's statement on Page 9 of the May 6, 2004 Office Action that states: "*Hiyoshi* does not specifically teach 'using a current user task context and content type'" to select sort keys for sorting the information items regarding the content. (May 6, 2004 Office Action, Page 9, Lines 2-3). Applicants also agree with the Examiner's statement on Page 5 of the April 28, 2005 Office Action that states: "*Hiyoshi* does not specifically teach 'sort keys derived from predetermined user sorting preferences for a current user task context and content type'". (April 28, 2005 Office Action, Page 5, Lines 14-15).

The April 28, 2005 Office Action relies on the *Signore* reference as teaching such a feature. *Signore* recites a process for reverse engineering a database to reconstruct a data structure. The *Signore* process is performed in three phases: (1) the identification of primary

keys, (2) the detection of indicators, and (3) conceptualization. (Signore, Page 129, Col. 1, Line 21 to Col. 2, Line 3).

The concept of identifying "primary keys" from a relational database as described in the first phase of the *Signore* process is not analogous to finding sort keys based on "user task context" and "content type" for the information items. There is no mention or suggestion in *Signore* of using a "user task context" to search for primary keys. Furthermore, in *Signore* user intervention is required to help select a primary key from potential primary keys (identification indicators) for reconstructing the data structure when a unique primary key is not automatically detected. *Signore* states: "Otherwise, we look for the usage of some subsets of the relations' attributes, detecting some *identification indicators*, that can help the user in the manual identification of the primary keys." (*Signore*, Page 120, Col. 1, Lines 31-33) (Emphasis added).

Signore also states: "Therefore, we think that it is necessary a user intervention to get the final decision by observing the clues detected in the previous phase." (*Signore*, Page 130, Col. 1, Lines 1-3) (Emphasis added). Therefore, the primary key in *Signore* is selected by the user in real-time based on identification indicators being currently viewed by the user. The *Signore* reference also states: "[T]he proposed approach requires a user interaction . . . . " (*Signore*, Page 135, Col. 2, Line 11) (Emphasis added).

There is no teaching or suggestion in *Signore* of a mechanism for deriving sort keys "from predetermined user sorting preferences for a current user task context and a content type for the information items" (Emphasis added), as now recited in independent Claims 1, 6, 11 and 16. In fact, *Signore* teaches away from the claimed invention by requiring the user

intervention to be performed in real-time based on currently viewable information. The user would not be able to select the primary key without first observing the identification indicators extracted from the information. Therefore, there is no motivation to modify *Signore* to select the primary key based on predetermined user preferences.

From the reasons set forth above it is clear that even if the teachings of the *Hiyoshi* reference and the teachings of the *Signore* reference were to be combined, the combination of the two references would not disclose, teach, or suggest the Applicants' invention as recited in Claims 1, 6, 11 and 16 (and their dependent claims).

With respect to Claim 3, the *Signore* reference does not teach selecting a secondary sort key based on a nature of the "current user task context" inferred from a primary sort key selected by a user. The *Signore* reference is silent concerning the concept of inferring the nature of a "current user task context" from a primary sort key. With respect to Claim 4, the *Signore* reference does not teach inferring a change in a "current user task context" from a change of a primary sort key by a user. The *Signore* reference is silent concerning the concept of inferring a change of a "current user task context" from a change of a primary sort key.

With respect to Claim 5, neither the *Hiyoshi* reference, nor the *Signore* reference, nor a combination of the two references, teach or suggest the concept of displaying a plurality of information items in an order determined by a sort controller "together with a user control calibrated to groupings having equivalent values under the primary sort key" where the primary sort key was "derived from predetermined user sorting preferences for a current user task context and a content type" for the information items.

With respect to Claim 6 and Claims 8-10, these claims have been amended to claim an apparatus instead of a receiver. The other elements of Claim 6 and Claims 8-10 are analogous to those elements discussed above in connection with Claim 1 and Claims 3-5. The Applicants hereby incorporate by reference the arguments and the citations to the specification that were made in connection with the Applicants' traversal of the rejections of Claim 1 and Claims 3-5, as amended, under 35 U.S.C. § 103.

For these reasons, the proposed *Hiyoshi-Signore* combination does not disclose, teach, or suggest the Applicants' invention as recited in Claim 1 (and its dependent claims) and as recited in Claim 6 (and its dependent claims). Accordingly, the Applicants respectfully request withdrawal of the § 103 rejections and full allowance of Claims 1, 3-6, 8-10, as amended.

The Examiner also stated that the limitations of the method claims (Claim 11 and Claims 13-15) parallel the limitations of the system claims (Claim 1 and Claims 3-5) and that they are rejected under the same rationale. (April 28, 2005 Office Action, Page 6, Paragraph 16). The Applicants respectfully traverse these rejections. The Applicants hereby incorporate by reference the arguments and the citations to the specification that were made in connection with the Applicants' traversal of the rejections of Claims 1, 3-6, 8-10, as amended, under 35 U.S.C. § 103. For the reasons and arguments previously presented, the rejected method claims (Claim 11 and Claims 13-15 are not obvious under 35 U.S.C. § 103. Accordingly, the Applicants respectfully request withdrawal of the § 103 rejections and full allowance of Claim 11 and Claims 13-15, as amended.

The Examiner also stated that the limitations of the signal claims (Claim 16 and Claims 18-20) parallel the limitations of the system claims (Claim 1 and Claims 3-5) and that they are rejected under the same rationale. (April 28, 2005 Office Action, Page 6, Paragraph 15). The Applicants respectfully traverse these rejections. The Applicants hereby incorporate by reference the arguments and the citations to the specification that were made in connection with the Applicants' traversal of the rejections of Claims 1, 3-6, 8-10, as amended, under 35 U.S.C. § 103. For the reasons and arguments previously presented, the rejected signal claims (Claim 16 and Claims 18-20, as amended) are not obvious under 35 U.S.C. § 103. Accordingly, the Applicants respectfully request withdrawal of the § 103 rejections and full allowance of Claim 16 and Claims 18-20, as amended.

The Examiner also rejected the Claims 21-24 that claim a user interface for receiving user input that identifies the "current user task context." (April 28, 2005 Office Action, Page 7, Paragraph 17). The Applicants respectfully traverse these rejections. The Applicants hereby incorporate by reference the arguments and the citations to the specification that were made in connection with the Applicants' traversal of the rejections of Claims 1, 3-6, 8-10, as amended, under 35 U.S.C. § 103. In particular, the Applicants note that the combination of the *Hiyoshi* and *Signore* references is silent concerning the concept of receiving a user input that identifies a "current user task context." Therefore, Claims 21-24, as amended, are not obvious under 35 U.S.C. § 103. Accordingly, the Applicants respectfully request withdrawal of the § 103 rejections and full allowance of Claims 21-24, as amended.

VI. CONCLUSION

As a result of the foregoing arguments and citations to the specification, the Applicants assert that Claims 1, 3-6, 8-11, 13-16 and 18-24, as amended, are in condition for allowance and respectfully request an early allowance of Claims 1, 3-6, 8-11, 13-16 and 18-24, as amended.

The Applicants respectfully deny any position or averment of the Examiner that is not specifically addressed by the foregoing argument and response.

The Applicants respectfully reserve the right to submit further arguments in support of the Applicants' above-stated position, as well as the right to introduce relevant secondary considerations including long-felt but unresolved needs in the industry, failed attempts by others to invent the invention, and the like.

SUMMARY

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

Although the Applicants do not believe that any fees are due at this time, the Commissioner is hereby authorized to charge any fees connected with this communication (including any extension of time fees) or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

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Date: June 9, 2005

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